REMARKS

This paper is responsive to a final Office action dated June 6, 2008. Claims 1-49 and 51-55 were examined. Applicants appreciate the indication that claims 1-48 are allowed.

Claims 49, 52, and 54-55 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,464,771 to Sorensen (hereinafter, "Sorensen"). Claims 51 and 53 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sorensen in view of Applicants' Own Admitted Prior Art.

Claims 49, 50, 52, and 54-55 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,464,771 to Sorensen (hereinafter, "Sorensen"). Applicants have carefully reviewed Sorensen and the Response to Amendment in paragraph 7 over the final Office action. Applicants still maintain that 49, 50, 52, and 54-55 distinguish over Sorensen. Claim 49 recites *counting a number of data transitions in a received data stream that occur over a number of cycles of an oscillator to generate a count value; and inhibiting adjustment of the oscillator if the count value of the number of data transitions in the received data stream is below a predetermined threshold.* As explained in paragraph [1039] of the instant specification, transition density counters can be used to indicate whether sufficient data transitions are present in the data stream DIN to allow an accurate frequency determination. Sorensen only teaches detecting if a transition of the data occurs and if not, utilizes NAND gate 15 to prevent adjustment of the oscillator. Col. 4, lines 26-40. The Office action points to Fig. 1 of Sorensen showing that the transition of the received data is compared to the clock signal. While Sorensen teaches detecting NRZ transitions in which a logical level of the data waveform only transitions when the data transitions, nowhere does Sorensen teach counting a number of transitions that occur over a number of cycles of an oscillator and generating a count value.

Sorensen teaches inhibiting adjustment of the oscillator if a transition does not occur by way of AND gate 15. The Office action further points to delay element 13, which stores the transition cycle from phase detector 4. Specifically, delay element 13 delays the D1 output from phase detector 4. Sorensen teaches at col. 3, line 41-48 that when the phase of the clock signal leads that of the data, the phase comparator 4 provides an output signal at the terminal 9, which

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is fed via a delay circuit 13 to NAND gate 15. Sorensen further teaches that when the phase of the clock signal leads that of the data, a transition of the clock signal at the input 7 of the phase detector will produce an output from the output 9 which is stored by means of the delay circuit 13 until it is determined whether a data transition arrives <u>during that clock cycle</u>. See col. 4, lines 26-40. However, storing an indication of whether the clock signal leads the data is not counting transitions. Sorensen simply does not teach counting *a number of data transitions stream <u>that occur over a number of cycles of an oscillator</u>*. Sorensen only detects whether a single transition has occurred, or not, for a particular cycle. Accordingly, applicants still maintain that claim 49, and claims dependent thereon, distinguish over Sorensen and the other references of record.

Applicants respectfully submit that independent claims 52 and 54 also distinguish over Sorensen. Similar arguments as above apply to independent claim 52 (*counter coupled to count a number of data transitions of a received data stream that occur over multiple cycles of an oscillator used to generate a recovered clock from the received data stream and generate a count value indicative thereof*) and to claim 54 (*means for counting a number of data transitions in a received data stream that occur over multiple cycles of an oscillator used to generate a recovered clock from the received data stream*). Sorensen does not teach the counter to count a number of data transitions. Nor does Sorensen teach the recited means, e.g., the counters shown in Fig. 6 of the instant application. Accordingly, applicants submit that claims 52 and 54, and all claims dependent thereon, distinguish over the references of record.

In summary, claims 1-49 and 51-55 are in the case. All claims are believed to be allowable over the art of record, and a Notice of Allowance to that effect is respectfully solicited. Nonetheless, if any issues remain that could be more efficiently handled by telephone, the Examiner is requested to call the undersigned at the number listed below.

Respectfully submitted,

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